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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,531	10/31/2003	Jeff William Peterson	00163.1817US01	2709
7590 12/27/2005			EXAMINER	
Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			KOSOWSKI, ALEXANDER J	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/699,531	Applicant(s) PETERSON ET AL.	
	Examiner Alexander J. Kosowski	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 59-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20, 25-27, 32-43, 45, 46 and 51-58 is/are rejected.
- 7) ☒ Claim(s) 21-24, 28-31, 44 and 47-50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/21/04, 6/21/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Claims 16-58 are presented for examination in light of the response to restriction filed 11/18/05. Claims 1-15 and 59-67 are withdrawn.

Claim Objections

- 2) Claims 21-24, 28-31, 44, 46-50 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

- 3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4) Claim 48 recites the limitation "the rinse agent" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

- 5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 6) Claims 16, 18, 25-26 and 33 are rejected under 35 U.S.C. 102(e) as being unpatentable by Buckroyd et al (U.S. PGPUB 2004/0134238).

Referring to claim 16, Buckroyd teaches a method comprising: providing a graphical user interface through which a field service person inputs one or more parameters associated with the service environment (Paragraph 0007); analyzing the one or more parameters to determine operational settings for use by the utility device in performing the service (Paragraph 0038); receiving through the graphical user interface an indication to activate the utility device to perform the service at the service environment and in response to the indication, controlling operation of the utility device based on the operational settings determined by the analyzing act (Paragraph 0039).

Referring to claim 18, Buckroyd teaches receiving through the graphical user interface a first parameter relating to a soil level on the articles (Paragraph 0067); receiving through the graphical user interface a second parameter relating to a specific type of water used to form the rinse agent (Paragraph 0063, whereby different water types include water at different temperatures); and receiving through the graphical user interface a third parameter identifying the chemical product (Paragraph 0058).

Referring to claims 25-26, Buckroyd teaches that the graphical user interface is presented to the field service person on a display device coupled to computer system and that the graphical user interface is presented to the field service person on a display device coupled to a client computer communicatively connected to the computer system (Paragraph 0036 and Figure 3).

Referring to claim 33, the method taught above could inherently be implemented on a computer system.

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7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 17, 34-35, 39-41 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Badami (U.S. Pat. 6,905,648).

Referring to claim 17, Buckroyd teaches the above. However, Buckroyd does not explicitly teach that in response to detecting that a parameter has been modified, analyzing the one or more parameters in conjunction with the modified parameter to render a modified set of operational settings, wherein the controlling act controls operation of the utility device based on the modified set of operational settings.

Badami teaches an appliance control system whereby modified parameters are detected and used to adjust operational settings of the appliance (col. 10 line 36 through col. 11 line 15).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to detect modified parameters and control a utility device based on modified operational settings in the invention taught above since this would allow the utility device to compensate for performance goals not being met by current appliance operation (Badami, col. 10 lines 58-59).

Referring to claim 34, Buckroyd teaches a method comprising: providing a graphical user interface through which a field service person inputs one or more parameters associated with the service environment (Paragraph 0007); analyzing the one or more parameters to determine operational settings for use by the utility device in performing the service (Paragraph 0038);

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receiving through the graphical user interface an indication to activate the utility device to perform the service at the service environment and in response to the indication, controlling operation of the utility device based on the operational settings determined by the analyzing act (Paragraph 0039). However, Buckroyd does not explicitly teach that in response to detecting that a parameter has been modified, analyzing the one or more parameters in conjunction with the modified parameter to render a modified set of operational settings, wherein the controlling act controls operation of the utility device based on the modified set of operational settings.

Badami teaches an appliance control system whereby modified parameters are detected and used to adjust operational settings of the appliance (col. 10 line 36 through col. 11 line 15).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to detect modified parameters and control a utility device based on modified operational settings in the invention taught above since this would allow the utility device to compensate for performance goals not being met by current appliance operation (Badami, col. 10 lines 58-59).

Referring to claim 35, see rejection of claim 18 above.

Referring to claim 39, see rejection of claim 33 above.

Referring to claim 40, Buckroyd teaches a method comprising providing a graphical user interface through which a field service person inputs one or more parameters associated with the service environment (Paragraph 0007); analyzing the one or more parameters to determine a set of operational settings for use by the utility device in performing the service (Paragraph 0038); saving the set of operational settings to memory for use in controlling operation of the utility device during performance of the service (Paragraph 0036); and displaying on the graphical user

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interface the set of operational settings determined by the analyzing act (Paragraph 0039).

However, Buckroyd does not explicitly teach presenting on the graphical user interface an electronic selection screen comprising an interface element for modifying at least one of the set of operational settings; and in response to modification of an operational setting, updating the set of operational settings to include the modified operational setting.

Badami teaches an appliance control system whereby parameters may be modified and the modifications are detected and used to adjust operational settings of the appliance (col. 10 line 36 through col. 11 line 15).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to allow entering modified parameters and control a utility device based on modified operational settings in the invention taught above since this would allow the utility device to compensate for performance goals not being met by current appliance operation (Badami, col. 10 lines 58-59).

Referring to claim 41, Buckroyd teaches receiving through the graphical user interface an indication to activate the utility device to perform the service at the service environment; and in response to the indication, controlling operation of the utility device based on the set of operational settings saved to memory (Paragraph 0039).

Referring to claim 51, see rejection of claim 33 above.

Referring to claim 52, the computer program product could inherently be a communications medium.

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9) Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Brady et al (U.S. Pat 5,681,400).

Referring to claims 19-20, Buckroyd teaches the above. However, Buckroyd does not explicitly teach evaluating the first parameter, the second parameter and the third parameter to determine a conductivity setpoint for the chemical solution, wherein the conductivity setpoint defines a target percent concentration of the chemical product within the chemical solution, nor detecting a current conductivity of the chemical solution in the solution tank; and dispensing a predetermined amount of the chemical product to the solution tank in response to the current conductivity falling below the conductivity setpoint.

Brady teaches an appliance controller whereby a user inputs a desired detergent concentration set-point and the controller dispenses chemicals and determines solution conductivity in order to meet the defined set-point (col. 4 line 31 through col. 5 line 24).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to set a concentration set-point and to dispense chemical product in response to measured conductivity in the invention taught above since the ability to program multiple detergent set-points a concentration controller can more effectively remove soil from wash items (Brady, col. 4 lines 36-39).

10) Claims 27, 32, 53-54 and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Guzzi et al (U.S. PGPUB 2001/0049846).

Referring to claim 27, Buckroyd teaches the above. However, he does not explicitly teach defining a plurality of candidate chemical products that may be used in the performance of

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the process at the service environment; determining a hardness level associated with the water; and analyzing the hardness level against each of the plurality of candidate chemical products to select therefrom the chemical product, wherein the selected chemical product is one of the one or more parameters input by the field service person through the graphical user interface.

Guzzi teaches a method of configuring a utility device whereby water hardness level is measured and multiple chemical products are selected to be used based on an optimized cleaning process (Paragraphs 0042, 0051 and 0054).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to determine hardness levels for water and select chemical products based on this analysis since utilizing hardness water sensors would allow an optimization module to account for initial water conditions and make the appropriate changes in the system conditions to optimize the cleaning of soiled articles (Guzzi, Paragraph 0051).

Referring to claim 32, the method taught above could inherently be implemented on a computer system.

Referring to claim 53, Buckroyd teaches a method comprising providing a graphical user interface through which a field service person inputs one or more parameters associated with the service environment (Paragraph 0007), evaluating the one or more parameters to determine operational settings for use by the utility device in performing the service (Paragraph 0038); receiving through the graphical user interface an indication to activate the utility device to perform the service at the service environment; and in response to the indication, controlling operation of the utility device based on the operational settings determined by the analyzing act (Paragraph 0039). However, Buckroyd does not explicitly teach defining a plurality of candidate

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chemical products that may be used in the performance of the service at the service environment; determining an average level of soil that will be washed from the articles by the utility device as a result of performance of the service; analyzing the average soil level against each of the plurality of candidate chemical products to select therefrom the chemical product, or that the selected chemical product is one of the one or more parameters input by the field service person through the graphical user interface;

Guzzi teaches a method of configuring a utility device whereby an average soil level can be determined and multiple chemical products are selected to be used based on an optimized cleaning process for the desired average soil level (Paragraphs 0042, 0051, 0054 and 0072).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to determine average soil level and select chemical products based on this analysis since detection of soil level and choosing appropriate chemicals would allow an optimization module to account for environmental conditions and make the appropriate changes in the system conditions to optimize the cleaning of soiled articles (Guzzi, Paragraph 0009).

Referring to claim 54, Buckroyd teaches the above. However, Buckroyd does not explicitly teach that the average soil level is another of the one or more parameters input by the field service person through the graphical user interface and analyzed by the evaluating act.

Guzzi teaches a method of configuring a utility device whereby an average soil level can be input and multiple chemical products are selected to be used based on an optimized cleaning process for the desired average soil level (Paragraphs 0042, 0051, 0054 and 0072).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to input average soil level and select chemical products based on this analysis since

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detection of soil level and choosing appropriate chemicals would allow an optimization module to account for environmental conditions and make the appropriate changes in the system conditions to optimize the cleaning of soiled articles (Guzzi, Paragraph 0009).

Referring to claim 57, see rejection of claim 33 above.

Referring to claim 58, the computer program product could inherently be a communications medium.

11) Claims 36-38, 42-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Badami, further in view of Brady.

Referring to claims 36-37, see rejection of claim 19-20 above.

Referring to claim 38, Buckroyd and Badami teach the above. However, they do not explicitly teach that the utility device is a warewash machine.

Brady teaches an optimizing controller for a warewash machine (col. 1 lines 32-52).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize the above in a warewash machine since a warewash machine is an example of a system whereby injection of additives needs to be controlled (Brady, col. 1 lines 33-34).

Referring to claim 42, Buckroyd teaches receiving through the graphical user interface a first parameter relating to a soil level on the articles (Paragraph 0067); receiving through the graphical user interface a second parameter relating to a specific type of water used to form the rinse agent (Paragraph 0063, whereby different water types include water at different temperatures); and receiving through the graphical user interface a third parameter identifying the chemical product (Paragraph 0058). However, Buckroyd does not explicitly teach that the

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analyzing act evaluates the first parameter, the second parameter and the third parameter to determine a conductivity setpoint for the chemical solution, wherein the conductivity setpoint defines a target percent concentration of the chemical product within the chemical solution.

Brady teaches an appliance controller whereby a user inputs a desired detergent concentration set-point which is based on conductivity (col. 4 line 31 through col. 5 line 24).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to set a concentration set-point based on desired conductivity in the invention taught above since the ability to program multiple detergent set-points a concentration controller can more effectively remove soil from wash items (Brady, col. 4 lines 36-39).

Referring to claim 43, Buckroyd teaches the above. However, Buckroyd does not explicitly teach detecting a current conductivity of the chemical solution in the solution tank; and dispensing a predetermined amount of the chemical product to the solution tank in response to the current conductivity falling below the conductivity setpoint.

Brady teaches an appliance controller whereby a user inputs a desired detergent concentration set-point and the controller dispenses chemicals and determines solution conductivity in order to meet the defined set-point (col. 4 line 31 through col. 5 line 24).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to set a concentration set-point and to dispense chemical product in response to measured conductivity in the invention taught above since the ability to program multiple detergent set-points a concentration controller can more effectively remove soil from wash items (Brady, col. 4 lines 36-39).

Referring to claim 45, see rejection of claim 38 above.

12) Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Guzzi, further in view of Badami.

Referring to claim 55, Buckroyd and Guzzi teach the above. However, they do not explicitly teach that the evaluating act comprises in response to detecting that a parameter has been modified, evaluating the one or more parameters in conjunction with the modified parameter to render a modified set of operational settings, wherein the controlling act controls operation of the utility device based on the modified set of operational settings.

Badami teaches an appliance control system whereby modified parameters are detected and used to adjust operational settings of the appliance (col. 10 line 36 through col. 11 line 15).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to detect modified parameters and control a utility device based on modified operational settings in the invention taught above since this would allow the utility device to compensate for performance goals not being met by current appliance operation (Badami, col. 10 lines 58-59).

13) Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckroyd, further in view of Guzzi, further in view of Badami, further in view of Brady.

Referring to claim 56, see rejection of claim 38 above.

Conclusion

14) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Metzger-Groom et al (U.S. PGPUB 2003/0106164) – teaches a method for cleaning a soiled article.

Reinhard (U.S. Pat 5,282,901) – teaches a method for dispensing detergent.

Howland et al (U.S. Pat 5,448,115) – teaches a warewashing control system.

Gardner, Jr. (U.S. Pat 6,377,868) – teaches management of chemical products.

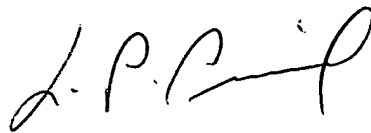
15) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 571-272-3744.

The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. In addition, the examiner's RightFAX number is 571-273-3744.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125



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